DOCUMENT RESUME

ED 113 774 CS 501 144

AUTHOR Johnson, Bonnie McD.; Leck, Glorianne M.
TITLE Philosophical Assumptions of Research on Gender Difference or: Two-By-Two and We'll Never Break Through.
PUB DATE Jul 75
NOTE 17p.; Paper presented at the Speech Communication Association Summer Conference (Chicago, July, 1975)

EDRS PRICE MF-$0.76 HC-$1.58 Plus Postage
DESCRIPTORS *Females; *Males; Physical Characteristics; *Sex (Characteristics); *Sex Differences; *Sex Role; Sex Stereotypes

ABSTRACT

The philosophical proposition axiomatic in all gender difference research is examined in this paper. Research on gender differences is that which attempts to describe categorical differences between males and females, based on a designated potential for sexual reproduction. The methodological problems raised by this assumption include the presumptions that masculinity and femininity are extreme opposites and that all persons in each group are more like the persons in their own gender identification group than they are like any one person in the other gender identification group. Anne Constantinople (1973) suggests that there is no rationale for believing that biological function is meaningful for understanding self-conception. This paper concludes by suggesting that the a priori assumption of two and only two genders has little to contribute beyond refinement of cultural prejudice and that the possibilities for use of such research by social planners is particularly treacherous. (LL)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED113774

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Philosophical Assumptions of Research on Gender Difference

or: Two-By-Two and We'll Never Break Through*

Bonnie McD. Johnson, Ph.D.
Penn State University
Speech Communication
University Park, Penna. 16802

Glorianne M. Leck, Ph.D.
Youngstown State University
Philosophy of Education
Youngstown, Ohio 44555

© 1975 Speech Communication Association

"PERMISSION TO REPRODUCE THIS COPYRIGHTED MATERIAL HAS BEEN GRANTED BY
Speech Communication Assn.
TO ERIC AND ORGANIZATIONS OPERATING UNDER AGREEMENTS WITH THE NATIONAL INSTITUTE OF EDUCATION. FURTHER REPRODUCTION OUTSIDE THE ERIC SYSTEM REQUIRES PERMISSION OF THE COPYRIGHT OWNER."

CS 501 144

Philosophical Assumptions of Research on Gender Difference
or: Two-By-Two and We'll Never Break Through*

Bonnie McD. Johnson
Pennsylvania State University

Glorianne M. Leck
Youngstown State University

The history of rhetoric about the rights and "proper" behavior of men and women reveals one consistent theme--claims about what ought to be are premised on claims about what is, what is "natural." In a list including Moses, Plato, Augustine, Luther, John Stuart Mill, and Congressman Emanual Cellar, we find advocates and opponents of equal social and political rights basing their arguments on what they have believed to be appeals to the "natural" behavior of men and of women. In this century claims about gender differences have been submitted to systematic investigation.

In the 1920's biologists offered "scientific evidence" to bolster arguments against British feminism. Julian Huxley, for example, concluded that the physical and psychic "differences (between men and women) are considerable; so considerable that they can never permit of the simple equivalence of the sexes" (quoted in Hall, 1973). More recently, psychologist Erik, Erikson has claimed that any woman's "somatic design harbors an 'inner space' designed to bear the offspring of chosen men, and with it, a biological, psychological, and ethical commitment to take care of human infancy" (1964). Not surprisingly some feminists have begun to use their research talents

to refute earlier findings of 'natural' differences between men and women. One example of this approach is Maccoby and Jacklin's, The Psychology of Sex Differences (1974). These authors devote their volume "To Equity, Affection, and Greater Understanding, Among Women, Among Men, and Between Men and Women." But in the introduction, they implicitly concur with the traditional assumption that decisions about how a "man" or a "woman" must live are dependent upon the natural abilities and inclinations of one's gender category.[1] The scientist must contribute the "facts" to a debate on social policy.

The purpose of this paper is to question the potential contribution of research on gender differences to public and private decisions about social roles of people identified as "men" and "women." We raise two questions:

1. What are the likely conclusions of research which begins with the a priori assumption of two and only two genders?
2. What are some possible social uses of research proporting to reveal categorical differences between two genders?

Research on gender differences is that which attempts to describe categorical differences between males and females. (e.g., How do males and females differ in their use of language, tolerance for pain, attitude toward dominance?). It also includes that which is directed toward discovering differing expectations or cultural prescriptions for males and females. We do not attempt here to review and synthesize the research on gender differences.[2] This is not a methodological critique, although we point to some general methodology problems. Rather, our intent is to consider the philosophical proposition axiomatic in all gender difference research: there are two and only two genders.

Are There Only Two Genders?

The assumption that there are males and females and NOTHING ELSE is probably the most hidden assumption underlying gender difference research. Maccoby and Jacklin, for example, never state how any of the 300 or so researchers they cite identified or defined gender of the subject. In fact they say, "A basic problem with the research on sex differences is that it is almost always impossible for observers to be blind to the sex of the subject" (p. 7). The dualism is assumed. We have been unable to find any gender difference researchers who state their operational definitions of gender! Presumably, they use a volunteered statement of sexual identification or they judge gender by appearance. Neither have we found researchers reporting about what they did with subjects who claimed to both male and female, or who could not be identified as man or a woman, or who were ambivalent. The bipolar conception of sex or reproductive function permeates the logic of research on gender differences.[3] This bipolar conception is:

Male is male.

Female is female.

No man is woman.

No woman is man.

The link between sexual definition and reproductive physiology is uncertain. We know that physiological sexual definition may be made on the basis of primary reproductive organs--internal and external, secondary sexual characteristics, hormonal balance, or chromosomal structure. We know also that sexual definition by one characteristic

does not always coincide with sexual definition by other characteristics. Some persons with "male" primary organs have some "female" secondary sexual characteristics and so forth. In the study of genetics, the combination of an X and a Y chromosome is regarded to be "male," two X chromosomes indicate "female." Yet some people have XXY chromosomes and some have a single X.

Although geneticists have more than two symbols to describe chromosome structures, even they fall back upon the folk assumption of only two sexes. Instead of calling an XXY a new sex, they call such a person male and proceed to investigate his sexually associated characteristics and tendencies (c.f. Owen, 1972). The investigation of behavioral tendencies of persons with "inconsistent" or "ambiguous" sexual characteristics is conducted by psychohomonal researchers. Note in the following passage the development of sexual definition for those who do not fall cleanly into either the "male" or "female" category:

> As ordinarily defined, hermaphroditism or intersexuality in human beings is a condition of prenatal origin in which embryonic and/or fetal differentiations of the reproductive system fails to reach completion as either entirely female or entirely male. In the very strictest sense, one could speak of chromosomal hermaphroditism, as in individuals with a 47,XXY chromosome count, namely Klinefelter's syndrome, or one of its variants such as 48 XXXY. In such individuals, the reproductive system passes as male, except for infertility of the testes. In ordinary usage, they are not classified as hermaphrodites. The same is true of rare cases of chromosomal mosaicism in which the pattern is 46,XX/46,XY, and the gonads dysgenetic--provided the external genitals are not ambiguously formed, which they may be.
>
> As ordinarily defined, hermaphroditism means that a baby is born with the sexual anatomy improperly differentiated. The baby is, in other words, sexually unfinished (Money and Ehrardt, 1972, p. 5).

Here we see data, observable physical structures, being forced into such categories as "ambiguous," "improperly differentiated," and "sexually unfinished." How else is a research to deal with a creature who is not "entirely male" or "entirely female"? The problem comes from the implicit assumption that there are two and only two sexes and that all offspring of sexual reproduction should have a designated potential for sexual reproduction. These are a priori assumptions or axioms. They are evidently not subject to modification. Data to the contrary is squeezed to fit the axioms rather than taken as evidence contradicting the axioms.

We can see the influence of these a priori assumptions underlying research on gender differences in selfconcept, social role, and behavioral style. Each of these variables potentially has any number of values. There are a wide variety of social roles, self-concepts, and behavioral styles. However, when the researcher sets out to investigate gender differences, the bi-polar conception of two exclusive genders is imposed. Instead of investigating interrelationships among roles, the researcher is attempting to categorize roles as men's roles or women's roles. Instead of investigating varieties of selfconcepts or behavioral styles, gender difference researchers classify concepts and styles into either "masculine" or "feminine." The problem thus faced by any gender difference researcher is one of relating many-valued, possibly multi-dimensional phenomena to a unidimensional, bipolar variable.

Because scientists take as the axiom of their research the folk assumption of two genders, they are inevitably led to classify their

observations into two categories. Thus the scientists perpetuate a cultural prejudice instead of unmasking it. Consider how a person becomes a man or a woman. A child is handed to its father, and he is told that it is female. A careful examination of the external genitals reveals no protrusions that would be regarded as male genitalia. So it is, the family begins treating the child as a female. If as the child is being raised, it begins to exhibit behaviors that are regarded as inappropriate to her pronounced gender role, she may be called a "tomboy."[4] Here we see that F is F but not acting as F. We fuse gender identity with reproductive identity and social role. The F cannot be an M (though she may act like we think an M acts) so she must be considered a subset of F. In this case we understand a tomboy to be a type of F. What else can we do, she must be either an M or an F.

The problem here is a logical one and exists in both social and natural sciences. If you describe the sexual characteristics of beings and type them, then you are always left with the problem of having to decide what to do with a being who is similar in the one judged significant category but different in another significant category. When is a person not a male or a female? If your axioms do not provide other options then you are led to attempt to categorize each person as one of two genders. More important, male is male and female is female and <u>all persons in each group are more like the persons in their own gender identification group than they are like any one person in the other gender identified group</u>.

Some of the methodological problems raised by the axiomatic assumption of only two genders are discussed by Anne Constantinople (1973). She reviewed attempts to create psychological measures of "masculinity" and "feminity." Presumably with a "M-F" scale a researcher would not have to rely on observing whether a person is a "man" or a "woman." Nor would the researcher depend upon a bipolar concept of male or female. The purpose of MF scales is to provide a means for measuring how "manly" or "womanly" a person is. However, the researchers who have constructed these scales have fallen into the trap of assuming that there are real men and real women. Constantinople observes three characteristics typical of these scales: First, M-F is a single dimension ranging from extreme masculinity at one end through extreme feminity at the other. That is, researchers assume bipolarity. Second, in order to insure that the MF scale is really measuring "masculinity" and "feminity," the scales are "validated" by administering them to men and women (again, no indication of how "men" and "women" are identified). Third, masculinity and feminity are presumed opposites. A woman who is low on feminity is correspondingly high on masculinity of, "A is not B and not A is B." We see here the influence of division by biological function (male vs. female) applied to selfconcept. Constantinople argues that to date no researcher has validated these scales as measuring "masculinity" or "feminity." In other words, they have shown no rationale for believing that biological function is meaningful for understanding self-conception. Furthermore, she critiques previous attempts to establish masculinity-feminity scales on the grounds that: (1) there is some evidence to support the idea that the variable is at least multidimensional, (2) there are methodological problems in validating a continuous variable

against a bipolar variable, (3) there is no evidence for bipolarity or the opposition of masculinity and feminity. She asks: "If MF reflects a number of subtraits, such as aggressiveness, sensitivity, self-confidence, etc., is there anything to be gained by combining these measures in ways which are most characteristic of men and women?" (p. 409).

It is clear to us in looking at the research that is done in trying to describe the differences between male and female, or men and women, that one cannot begin one's argument by assuming that there are two different groups of subjects, namly M and F and then proceed to enlighten the world by announcing that there is a difference between M and F. It seems to us that such a maneuver both begs the question and argues tautologically. We chide researchers for struggling to maintain a simple two gender categorization system. Outcomes that would reveal evidence of new genders and new gender roles would pose difficult problems to be sure. It we discover that there are those who are not male or female or who are both or who are some, we will raise difficult social problems.

The assumptions of gender difference research are culture bound and philosophically unsound, and as usual we have bent our research to meet our own expectations. The formal study of gender differences does not purport to develop social or political examination of values. It merely intends to continue to assume that male and female are the two types. All persons are either male, female or abnormal. Reproduction is implicitly promoted as the major purpose of all creatures.

All creatures, if normal, therefore have functional reproductive organs and a concomitant gender role identity.

Gender Difference Research as Preface to Social Engineering

Our second concern is with the possible social uses of research on gender differences. We see a thriving--probably even a growing--clientele for this research. Courses in the psychology of women and sociology of women, require students to learn about the behavioral differences between men and women. The testimony of people speaking both for and against the ERA is full of references to categorical differences between men and women. As long as the question of the rights and obligatory behaviors of men and women is a matter of policy, we can expect both sides of the policy debate to supply a steady demand for research into gender differences.

For us, however, the question is not what is the "fact." We do not claim that all science is a waste of time and money. Nor do we claim that behavioral regularities could not be discovered and cateloged. Rather, we claim that the categorical nature of research into sex differences cannot help but produce treacherous social engineering. Research which begins by assuming that everyone may be put into one or two slots cannot help but result in findings in which people are categorized into one or two slots.

As funding for research becomes scarce, we are called upon to "justify" the social purposes of our efforts. At the policy making level, policy makers must decide which research to use, and as suggested earlier in this paper we find that policy makers use the

research that supports their ethical position (see Hall, 1973). On a matter relating to whether or not persons ought to have equal rights regardless of their race, creed, or gender, it is absurd to assume that research will contribute to the enlightenment of the decision makers. We all know that research begins with certain metaphysical and logical assumptions; therefore the research model is already indicative of or contains the implied and eventual outcome that it would disclose to the policy makers.

Doing research to decide something as simple as whether or not women can safely lift 100 pound bags is an atrocity.

1. It assumes only two gender types male and female.
2. It assumes all of those beings identified as female are more like each other than they are like any one being identified as male.
3. It may involve the subset problems of:
   A. deciding how much relationship exists between physical possibility and physical development.
   B. deciding whether attitudes about gender role effect physical functionability, etc.

To put it quite simply - one must understand that research on gender differences is not supported as a search for revelations through new knowledge, it is developed for justification of philosophical arguments related to how persons should be regarded; it is developed for economic arguments regarding how work and wealth should be distributed; and it is developed for political persuasion regarding control, power and authority. The philosophical problem of whether or not we

ought to maintain standards for recognition of difference in race, creed, and gender is not going to be touched by research on gender, racial, or religious differences. The question is one of ethics. The gender difference researcher assumes and perpetuates the status quo, therefore it is politically reactionary and ethically biased toward non-equality and non examination at the appropriate level of inquiry.

But what of private policy -- our decisions about how we know who we are and how we communicate our identity to one another? The claim can be made that sex difference research may raise our consciousness about discriminatory treatment. But what does it tell us as individuals when the scientist determines that "women are more persuasive than men" -- "less persuasive than men" -- "men and women are equally persuasive?" The scientist's tools require objectification and generalization. Are we as individuals the "women" and "men" to whom the scientist refers? Scientists are the first to point out that it is fallacious to attribute the characteristics of a general population to any particular individual. We suggest then that while generalizations about general characteristics are a poor basis for societal legislation, they are even less desirable as rationale for individual decisions.

Consciousness-raising is a matter of personal knowledge. The influence of scientific formulation on personal knowledge is highly tenuous. If the aim is to learn how to combat sexism in our own lives, we suggest that there are better ways of spending our time than doing gender difference research which can only succeed in defining each of us as a male or a female.

In this paper we have examined some philosophical assumptions underlying gender difference research. First we observed that such research which begins with the a priori assumption of two and only two genders has little to contribute beyond refinement of cultural prejudice. Second, we argued that the possibilities for use of such research by social planners is particularly treacherous. Moreover, categorical research can do little to enlighten personal understanding of the world and how individuals confront it.

Notes

*The authors thank Jean Engle and Pat Tuchscherer for their criticisms and suggestions of earlier versions of this paper.

[1]Specifically, Maccoby and Jacklin state: "Questions about the psychological nature of man and woman are currently under intense debate. . . . If psychological differences do exist, on the average, are the differences great enough to impose any limits on, or indicate any especially promising directions for, the kinds of lives that individuals of the two sexes may reasonably be expected to lead? . . . We have proceeded on the assumption that before we can attempt to understand the "why" and "how" of psychological sex differentiation, we must have as accurate and detailed a knowledge as possible concerning the nature of existing differences and the changes these differences undergo at successive ages. (p. 1).

[2]For recent reviews of gender difference research other than Maccoby and Jacklin, see J. Z. Giel (1971); Wiesstein (1971); Stein and Bailey (1973); Johnson and Benson (1974).

[3]We recognize the imprecision of the term "reproduction function." (E.g., are sterile females still females?) The difficulty of naming a variable whose values are "male" and "female" illustrates the point we are trying to make. One is tempted to say, "ah, you know, the thing that makes little boys different than little girls." With any particular differentiation there are more than two possible categories.

[4]Money and Ehrhardt state that: "Genetic females masculinized in utero and reared as girls have a high chance of being tomboys in their

behavior. The elements of tomboyism are as follows: 1. The ratio of athletic to sedentary energy expenditure is weighted in favor of vigorous activity, especially outdoors. . . . 2. Self-assertiveness in competition for position in the dominance hierarchy of childhood is strong enough to permit successful rivalry with body. . . . 3. Self-adornment is spurned in favor of functionalism and utility in clothing, hairstyle, jewelry, and cosmetics. . . . 4. Rehearsal of maternalism in childhood dollplay is negligible. . . . 5. Romance and marriage are given second place to achievement and career. Priority of career over marriage, preferably combining both, is already evident in the fantasies and expectancies of childhood. . . . Once sexual life begins, there is no evidence of lack of erotic response--rather the opposite. There is no special likelihood of lesbianism. 6. In adulthood, according to preliminary evidence, responsiveness to the visual (or narrative) erotic image may resemble that of men rather than women. That is to say, the viewer objectifies the opposite-sexed figure in the picture as a sexual partner, as men typically do (1972, pp. 9-11).

Sources

Constantinople, Anne, "Masculinity-feminity: An exception to a famous dictum?" Psychological Bulletin 80 (1973), 389-407.

Erikson, Erik, "Inner and outer space: reflections on womanhood," Daedalus 93 (1964), 582-606.

Giel, J. Z., "New developments in research on women," introductory essay to the new edition of Viola Klein, The Feminine Character History of an Ideology (Chicago: University of Illinois Press, 1971).

Hall, D. L., "Biology, sex hormones, and sexism in the 1920's," The Philosophical Quarterly, (Fall-Winter, 1973-74), 81-96.

Johnson, B. and Benson, T., "Gender differences and leadership contentions - the rhetoric social research," Research in Communication, ERIC, 1974.

Maccoby, E. E. and Jacklin, C. N., The Psychology of Sex Differences (Stanford: Stanford University Press, 1974).

Money, J. and Ehrhardt, A. A., Man & Woman, Boy & Girl (Baltimore: The Johns Hopkins University Press, 1972).

Stein, A. H. and Bailey, M. M., "The Socialization of achievement orientation in females," Psychological Bulletin, 80 (1973), 345-366.

Weisstein, N. "Psychology constructs the female," in V. Gornick and B. K. Moran (eds.) Woman in Sexist Society (New York: Basic Books, 1971).